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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS AND COMPOUNDS FOR MODULATING NUCLEAR RECEPTOR ACTIVITY

(57) Abstract: The present invention relates to methods and agonist/antagonist compounds for modulating nuclear receptor activity, and nuclear receptor ligand binding. The invention includes a method for identifying residues comprising a ligand binding domain for a nuclear receptor of interest. Also included in a method of identifying agonists and/or antagonists that bind to the ligand binding domain of the nuclear receptors, and the estrogen receptor in particular. The invention is exemplified by identification and manipulation of the ligand binding domain of the estrogen receptor and compounds that bind to this site. The methods can be applied to other nuclear receptors including TR, GR and PR.

INTERNATIONAL SEARCH REPORT

enternational Application No PCT/US 99/06937

A. CLASSIF IPC 6	GO1N33/48			
According to	International Patent Classification (IPC) or to both national classific	cation and IPC		
B. FIELDS				
Minimum do	cumentation searched (classification system followed by classifica	tion symbols)		
IPC 6	GOIN			
Documentati	on searched other than minimum documentation to the extent that	such documents are included in the fields se	erched	
	ata base consulted during the international search (name of data b	ase and where practical search terms used)		
Electronic d	ata base consumed during the fine fine forms of the fine of the fi			
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where appropriate, of the ri	elevant passages	Relevant to claim No.	
A	WO 97 21993 A (UNIV CALIFORNIA) 19 June 1997 (1997-06-19) page 1, line 11 - page 3 page 6, line 25 - page 11, line	e 7	1	
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A	EP 0 639 584 A (INTERPHARM LAB 22 February 1995 (1995-02-22)	LTD)	1	
A	WO 94 28028 A (SELECTIDE CORP) 8 December 1994 (1994-12-08)		I	
Fur	ther documents are listed in the continuation of box C.	Patent family members are listed	in annex.	
*T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention. *E' earlier document but published on or after the international filing date. *L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified). *O' document referring to an oral disclosure, use, exhibition or other means. *P' document published prior to the international filing date but later than the priority date claimed. *T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the cited to understand the principle or theory under				
	e actual completion of the international search	Date of mailing of the international se-	arch report	
	20 August 1999	0 6. 0 9. 99		
Name and	d mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, East (+31-70) 340-3016	Authorized officer Schorsack, B		

INTERNATIONAL SEARCH REPORT

International application No

PCT/US 99/06937

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely
Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically see Further Information sheet PCT/ISA/210
3. Claims Nos. because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international Search Report covers only those claims for which fees were paid, specifically claims Nos
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims, it is covered by claims. Nos.
·
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.
140 protest accompanied the payment of accumulations.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 2-71

In view of the large number and also the wording of the claims render it difficult, if not impossible, to determine the matter for which protection is sought. The present application fails to comply with the clarity and conciseness according to Article 6 PCT (see also Rule 6.1(a)PCT).

Furthermore, the application does not appear to fulfill the requirements of Rule 13 PCT, since it relates to different subject matters:

A) Claims 1, 14: A method of identifying a compound....
Claim 24: A method for identifying an agonist...
Claim 67: A method of modulating nuclear receptor activity...

B) Claim 40: A machine-readable data storage medium...
Claim 52: A computational method....

Claims 29 and 67 are directed to a method for treatment practised on the human/animal body by surgery (Rule 39.1(iv)).

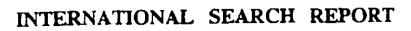
The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Information on patent family members

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